## INTERNATIONALSEARCHREPORT

International application No. PCT/JP2005/012273

## A. CLASSIFICATION OF SUBJECT MATTER

IntCl. 7 B41J2 / 165, 2/18, 2/185

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. 7 B41J2 /165, 2/18, 2/185

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2005
Registered utility model appecifications of Japan 1996-2005
Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document with indication, where appropriate, of the relevant passages	Relevant to claim No.
<b>Y</b> .	JP 2001-71514 A(SEIKO EPSON CORPORATION) 21. 03.2001, see whole document . & EP 1083052 A2 & US 6481826 B1	1-10
Y	JP 2003-276213 A(SEIKO EPSON CORPORATION) 30.09.2003, column 9 lines 21-30 . & US 2003/0234829 Al	1-10
Y	JP 2003-96355 A(RICOH COMPANY, LTD.) 03.04.2003, column 1 lines 2-15 & EP 1262529 A1 & US 2003/0107632 A1	7

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Ψ	Further documents are listed in the continuation of Box C	f See patent family annex.
"P"	Special categories of cited documents: document defining the general state of the art which is n considered to be of particular relevance earlier application or patent but published on or after the inte national filing date document which may throw doubts on priority claim(s) or whic is cited to establish the publication date of another citation or othe special reason (as specified) document referring to an oral disclosure, use, exhibition or othe means document published prior to the international filing date but late than the priority date claimed	understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family
Date of the actual completion of the international search  15.07.2005		Date of mailing of the international search report  O2. 8. 2005
Name and mailing address of the ISA/JP  Japan Patent Office  3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Authorized Officer Kirihata Yukihiro TelephoneNo. +81-3-3581-1 101 Ext. 3261